

adult throughout southern Europe from the early summer to the end of the year. I was surprised to find a high proportion of immature grass-hoppers so late in the season.

Of course, *Calliptamus italicus*, L., was numerous. This is a remarkable species. The male is about half the size of the female, but both vary extensively in dimensions as well as colour. Brunner has recognised several of these forms by name, but it has been regarded as a single species. However Captain Campbell, an excellent observer, but with no systematic knowledge, noticed in Macedonia that there were two quite distinct races which never met, as they appeared at different times, and now the opinion is in favour of splitting it. Hitherto, only the Canary form, *C. vulcanius*, Kr., has been recognised as distinct, the Madeiran form being associated to the European. But now it looks as though the Madeiran is really near the Canary one and that the whole group will be split into half a dozen distinct species, or perhaps even more.

I sent the Orthoptera to Mr. Uvarov to be verified. In the bottles with them were a few casuals, four common Rhynchota, *Graphosoma lineatum*, L., *Eurydema ornatum*, L., *E. festivum*, L. and *Codophila varia*, F. These are very ordinary and call for no comment, but what puzzled the staff at the Museum was a big wasp. This was clearly a species of *Belonogaster*, a big handsome fellow, but what was he doing in Spain? He caused, in fact, quite a commotion, and they came to the conclusion that it must have been a straggler from the tropics. When I heard this, I realised that I was myself the cause of all the pother. I had used an old killing-bottle that I had last had in my hands in Northern Rhodesia. That wasp must have come from the Luano Valley, and been lying in the bottle four years.

Reduviidae collected in the Barberton District, Eastern Transvaal.

By J. SNEYD TAYLOR, M.A., D.I.C., F.E.S.

The following twenty-nine species of *Reduviidae* were collected in the Barberton District, Eastern Transvaal, during five-and-a-half years residence there. As sufficient time was not available in order to make a systematic collection, the list is probably very far from being complete, and it could doubtless be considerably augmented by anyone fortunate enough to be able to devote all his time to collecting in this district, which is so rich in entomological fauna. The majority of the species contained in the list were collected in the vicinity of the town of Barberton, and the remaining few on brief and occasional visits to other parts of the district.

The altitudes of the various localities mentioned are as follows:—Barberton, 2,825 feet; Nelspruit, 2,349 feet; White River, about 3,300 feet; Tonetti, about 1,360 feet.

In five cases, where the specific name is not given, the species concerned were not previously represented in the British Museum collection, while in one instance the genus was also not represented.

I am indebted to Mr. B. P. Uvarov, of the Imperial Institute of Entomology, for determining the majority of the species.

Tribelocephala boschjesmana, St.—Two specimens obtained at light, October and November, Barberton.

Oncocephalus caffer, St.—Two specimens obtained at light, September and March, Barberton and Nelspruit.

Oncocephalus annulipes, St.—Two specimens obtained at light, March, Nelspruit.

Varus flavoannulatus, St.—One specimen obtained at light, October, Barberton.

Reduvius tarsatus, Germ.—Common at light, October, February, Barberton.

Reduvius sp. ?—One specimen obtained at light, November, Barberton.

Sastrapoda baerensprungi, St.—One specimen obtained at light, December, Barberton.

Edola sp. ?—One specimen found under a stone, apparently hibernating, July, Barberton.

Acanthaspis obscura, St.—Common at light, November-June, Barberton.

Acanthaspis lurco, St.—Common at light, October-February, Barberton.

Pirates lugubris, St.—One specimen obtained at light, January, Barberton.

Pirates sp. ?—Two specimens obtained at light, March, Nelspruit.

Leptodema acanthocephala, Carl.—One specimen found in the house, apparently at light, January, Barberton.

Rhinocoris violentus, Germ.—One specimen found in cotton field, March, Barberton.

Rhinocoris tristis, St.—One specimen obtained on tobacco plant, January, Barberton.

Rhinocoris tibialis, St.—One specimen found in house, apparently at light, April, Barberton. (Two specimens obtained on cotton plant, February, Magut, N. Natal).

Rhinocoris abopunctatus, St.—Occasionally found in cotton fields, and on wild plants. Has been observed preying upon Lepidopterous larvae. October-June, Barberton.

Rhinocoris segmentarius, Germ.—The commonest species met with in the field, it has frequently been observed in association with infestations of cotton, maize, tomatoes, peas, etc., by larvae of *Heliothis obsoleta*, Fabr. and other Noctuids, upon which it preys. Egg-clusters (*Ent. Rec. & Jr. Var. XL.*, p. 141) have been found on cotton foliage. The species occurs commonly, September-May, Barberton and Tonetti.

Rhinocoris sp.—One specimen found on grass, April, Barberton.

Rhinocoris sp.—One specimen found in cotton field, March, Barberton.

Pantoleistes princeps, St.—Fairly numerous on trunk and branches of *Acacia* sp. ?, February, 1928, Barberton.

Endochus cinnamopterous, Dist.—(?) One specimen obtained on citrus tree on which larvae of *H. obsoleta* were abundant at the time, September, Nelspruit.

Phonoctonus formosus, Dist.—Two specimens found on citrus, November and February, White River.

Coranus carbonarius, St.—One specimen found under pea plant in the presence of larvae of *Euxoa segetum*, Schiff., August, Barberton.

Coranus papillosum, St.—A common species found in the field. During the summer it has frequently been observed in cotton fields

where it preys upon "bollworms" and other Lepidopterous larvae. In the winter months it has been found under pea plants in the presence of larvae of *F. segetum* and *Laphygma exigua*, Hbn., and also among debris in cotton fields. Barberton.

Coranopsis vittata, Horv.—Three specimens obtained, one on kaffir-corn, infested by larvae *H. obsoleta*, one among debris in cotton field, and one at light, January, August, and September respectively, Barberton.

Ploearia hewitti, China.—Three specimens obtained, two at light, and one on grass, April, September, and July, Barberton.

Physorhynchus crux, Thunberg.—Two specimens obtained, one on garden path, and one in house, January, and March, Barberton.

Records of Immigrant Lepidoptera seen at Hastings (East Hill), with dates on which specimens were on the wing.

By CAPT. T. DANNREUTHER.

Pyrameis cardui.—First appearance in Hastings Aug. 3rd (W.F.) Single specimens 12th : 13th : 17th four rosy fresh : 18th two worn : 19th three : 23rd : Sept. 4th three.

Pyrameis atalanta.—May 15th : Aug. 8th seven : 15th : 17th three : 18th four : 23rd : 28th two : Sept. 7th two.

Colias croceus.—Aug. 9th three : 12th : 16th two : 24th.

Pieris brassicae.—First appearance May 29th then average.

Pieris rapae.—More abundant than usual but no direct evidence of immigration. In hot spell in August at the maximum 19 summer brood counted feeding on one lavender bush. Few left in Sept.

Pieris napi.—Not common. Seen July 27th : and Aug. 17th two.

Aglais urticae.—Common but no indication of immigration. Several taken Aug. 5th and 8th : 17th eight : Sept. 12th two on the beach.

No Hawk-Moths or vagrant lepidoptera seen [except one *Auorpha populi* at Battle July 13th, and larvae of *Chaerocampa elpenor* Aug. 20th (J. E. Ray.)]

Plusia gamma.—Taken in daylight : June 28th : July 28th two : Aug. 6th : 9th : 10th two : 13th seven : 15th fourteen : 16th two : 18th twenty-one : 19th four : 21st : 24th : 25th : 28th.

Nomophila noctuella.—Sept. 6th.

Pionea ferugalis.—Aug. 16th two.

Dragonflies, probably residents—*Sympetrum sanguineum* Aug. 25th. *Aeschna miata* Aug. 16th : 17th five. (*Aeschna cyanea*, *Sympetrum striolatum*, *Aeschna grandis*, and *Agrion puella* also taken but not classed as possible immigrants).

Other records reported from elsewhere :—

Colias hyale and *C. croceus* at Waldringfield (Suffolk) May 13th (Rev. A. P. Waller.)

Pyrameis cardui.—Corton Cliffs. July 5th, three worn. (J.G.)

Pyrameis atalanta.—Norwich. Aug. 4th new brood. (G.J.C.)

Phyxalis livornica.—Grantham (Lincs.) early June (H. Preston.)

Nomophila noctuella.—Crumbles (Eastbourne) May 28th (H. Main).

Wm. Fassnidge wrote from Maurin, Basses-Alpes, on Aug. 29th :—
"Glorious weather but a bad season. A few immigrants have shown